DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 85 - NUTRIENTS MANAGEMENT CONTROL REGULATION 5 CCR 1002-85

85.1 AUTHORITY

The Water Quality Control Commission is authorized by section 25-8-205 C.R.S., to promulgate control regulations to describe prohibitions, standards, concentrations, and effluent limitations on the extent of specifically identified pollutants that any person may discharge into any specific class of state waters.

Materials incorporated by reference are available for public inspection during normal business hours, or copies may be obtained at a reasonable cost, from the Administrator, Water Quality Control Commission, 4300 Cherry Creek Drive South, Denver, Colorado 80246. Unless expressly stated otherwise, materials incorporated by reference are those editions in existence as of the date this regulation is promulgated or revised by the Water Quality Control Commission and references do not include later amendments to or editions of the incorporated material. All material incorporated by reference may be examined at any state publications depository library.

85.2 APPLICABILITY

This regulation applies to point sources and nonpoint sources of nutrients <u>to surface water</u> as identified in this regulation.

85.3 SEVERABILITY

The provisions of this regulation are severable, and if any provisions or the application of the provisions to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this regulation shall not be affected thereby.

85.4 DEFINITIONS

See the Colorado Water Quality Control Act and the Water Quality Control Commission codified regulations for additional definitions.

- (1) "BEST MANAGEMENT PRACTICE (BMP)" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "state waters." BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- (2) "DISADVANTAGED COMMUNITY" means a community that meets the criteria for disadvantaged community as defined in section 85.7 has a population of 5,000 or less with a median household income that is 80% or less of the statewide median household income.
- (3) "EXISTING TREATMENT FACILITY" means any existing domestic or non-domestic wastewater treatment facility that commences discharge or receives PELs or site approval prior to May 31, 2012 for groundwater discharge, surface water discharge, or a non-discharging facility; or that applies for a Notice of Authorization for the application of reclaimed water prior to May 31, 2012.
- "LOCAL GOVERNMENT" means a city, town, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under section 208 of the federal Clean Water Act.
- (54) "MS4" means a municipal separate storm sewer system.

- "MUNICIPAL SCREENER" means the average total annualized cost per household of pollution control including the cost of meeting the effluent limitations at 85.5 and other costs of complying with Regulation 85, divided by the median annual household income, on a percentage basis [i.e. (average total annual pollution control cost per household / median household income)*100].
- (76) "NEW TREATMENT FACILITY" means any new domestic or non-domestic wastewater treatment facility on a new site that commences discharge to surface water, or receives PELs, after May 31, 2012. —
- "NONPOINT SOURCE" means any activity or facility other than a point source from which pollutants are or may be discharged. For the purposes of this regulation, nonpoint source includes all runoff that is not subject to the requirements provided under Regulation #61, section 61.3(2)(e), (f), or (g), including those designated by the Division under section 61.3(2)(f)(iii), whether sheet flows or collected and conveyed through channels, conduits, pipes or other discrete conveyances.
- (27) "STORMWATER" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

85.5 SPECIFIC LIMITATIONS FOR DISCHARGERS OF NUTRIENTS

The effluent limitations and stormwater management practices in this section shall be implemented in the Colorado Discharge Permit System (CDPS) <u>and National Pollutant Discharge Elimination System (NPDES)</u> permits authorizing the discharge <u>to surface water</u> beginning no sooner than July 1, 2013.

- (1) Numeric Limitations for Domestic Wastewater Treatment Works (DWWTW)
 - (a) <u>Existing Treatment Facilities: Domestic Wastewater Treatment Works discharging</u> prior to May 31, 2012 or that have submitted a complete request for preliminary effluent limits to the Division prior to May 31, 2012
 - (i) Exclusions
 - The numeric limits in subsections (iii)(a) and (b) below will not be included in <u>CDPS and NPDES permits and will only be included in</u> preliminary effluent limitations for Site Location and Design Approvals <u>upon request and with a delayed effective date or in effluent limitations in CDPS permits</u> for the following categories of dischargers:
 - (A) Any DWWTW with a design capacity of less than or equal to 1.0 million gallons per day.
 - (B) Any DWWTW owned by a disadvantaged community.
 - (ii) Delayed Implementation of Effluent Limits

 The numeric limits in subsections (iii)(a) and (b) below will not be included in preliminary effluent limitations with a delayed effective date for Site Location and Design Approvals or in and will not be included in effluent limitations in CDPS and NPDES permits prior to May 31, 2022 for the following categories of dischargers:
 - (A) Any currently permitted DWWTW subject to Watershed Protection Control Regulations 71-74 (5 CCR 1002-71, 5 CCR 1002-72, 5 CCR 1002-73, and 5 CCR 1002-74).
 - (B) Any existing permitted DWWTW with a design capacity of less than or equal to 2.0 million gallons per day.
 - (C) Any existing permitted facility discharging into low priority 8-digit

hydrologic units code watersheds [Purgatoire <u>11020010</u>, Upper Arkansas-John Martin Reservoir <u>11020009</u>, Upper San Juan <u>14080101</u>, Upper Arkansas-Lake Meredith <u>11020005</u>, Upper White <u>14050005</u>, San Luis <u>13010003</u>, Chico <u>11020004</u>, Kiowa <u>10190010</u>, Middle South Platte-Sterling <u>10190012</u>, San Miguel <u>14030003</u>, Alamosa-Trinchera <u>13010002</u>, McElmo <u>14080202</u>, Lower Gunnison <u>14020005</u>, Arkansas Headwaters <u>11020001</u>, Upper Yampa <u>14050001</u>, Upper Gunnison <u>14020005</u>, and Uncompander <u>14020006</u>].

(iii) All Others

For all Domestic Wastewater Treatment Works not identified in subsections (a)(i) or (ii) above and discharging prior to May 31, 2012 or for which a complete request for preliminary effluent limits has been submitted to the Division prior to May 31, 2012, the following numeric limits shall apply:

| PARAMETER | PARAMETER | PARAMETER | |
|-----------------------------------|-----------------|-------------------|--|
| | LIMITATIONS | LIMITATIONS | |
| | Annual Median 1 | 95th Percentile 2 | |
| (a) Total Phosphorus | 1.0 mg/L | 2.5 mg/L | |
| (b) Total Inorganic Nitrogen as N | 15 mg/L | 20 mg/L | |
| 3 | - | | |

- 1 Rolling Running Annual Median: The median of all samples taken in the most recent 12 calendar months.
- 2 The 95th percentile of all samples taken in the most recent 12 calendar months.
- 3 Determined as the sum of nitrate as N, nitrite as N, and ammonia as N.
 - (b) New Treatment Facility: For New Domestic Wastewater Treatment Works which submit a complete request for preliminary effluent limits to the Division on or after May 31, 2012, the following numeric limits shall apply:

| PARAMETER | PARAMETER | PARAMETER | |
|-----------------------------------|-----------------|-------------------|--|
| | LIMITATIONS | LIMITATIONS | |
| | Annual Median 1 | 95th Percentile 2 | |
| (a) Total Phosphorus | 0.7 mg/L | 1.75 mg/L | |
| (b) Total Inorganic Nitrogen as N | 7 mg/L | 14 mg/L | |
| 3 | | - | |

- 1 Rolling Running Annual Median: The median of all samples taken in the most recent 12 calendar months.
- The 95th percentile of all samples taken in the most recent 12 calendar months.
- 3 Determined as the sum of nitrate as N, nitrite as N, and ammonia as N.
- (2) Numeric Limitations for Non-Domestic Wastewater Treatment Works
 - (a) <u>Existing Treatment Facilities:</u> Non-Domestic Wastewater Treatment Works Discharging Prior to May 31, 2013.
 - (i) Delayed Implementation of Effluent Limits

 The numeric limits in subsections 85.5(1)(a)(iii)(a) and (b) above will not be included in effluent limitations in CDPS permits prior to May 31, 2022 for any existing permitted facility discharging into low priority 8-digit hydrologic units code watersheds [Purgatoire 11020010, Upper Arkansas-John Martin Reservoir 11020009, Upper San Juan 14080101, Upper Arkansas-Lake Meredith 11020005, Upper White 14050005, San Luis 13010003, Chico 11020004, Kiowa 10190010, Middle

South Platte-Sterling <u>- 10190012</u>, San Miguel <u>- 14030003</u>, Alamosa-Trinchera <u>- 13010002</u>, McElmo <u>- 14080202</u>, Lower Gunnison <u>- 14020005</u>, Arkansas Headwaters <u>- 11020001</u>, Upper Yampa <u>- 14050001</u>, Upper Gunnison <u>- 14020002</u>, and Uncompahgre <u>- 14020006</u>] except for dischargers that are discharging effluent concentrations of TN or TP that are greater than 53 mg/L and 6 mg/L, respectively.

- (ii) All Others
 - The provisions of section 85.5(1)(a)(iii) apply to non-domestic wastewater treatment works discharging prior to May 31, 2013 but not covered by the delay provided in subsection (i) above:
 - (A) whose Standard Industrial Classification code is in the Major Group 20, and
 - (B) any other non-domestic dischargers, except stormwater, for which the Division has determined, based on credible information that the facility is expected, without treatment for nutrients, to discharge total inorganic nitrogen or total phosphorus concentrations to surface waters in excess of the respective effluent limitations identified in section 85.5(1)(a)(iii).
- (b) <u>For New Treatment Facilities, Non-Domestic Wastewater Treatment Works</u>
 <u>Which Begin Discharging On Or After May 31, 2013.</u> <u>t</u>The provisions of section 85.5(1)(b) apply to non-domestic wastewater treatment works:
 - (i) whose Standard Industrial Classification code is in the Major Group 20, and
 - (ii) any other non-domestic dischargers, except stormwater, for which the Division has determined, based on credible information that the facility is expected, without treatment for nutrients, to discharge total inorganic nitrogen or total phosphorus concentrations to surface waters in excess of the respective effluent limitations identified in section 85.5(1)(b).
- (3) Additional Provisions Applicable to Domestic and Non-Domestic Wastewater Treatment Works
 - (a) Compliance Schedules
 - A permit shall not be issued which allows a violation of the provisions of this control regulation unless it contains a schedule of compliance requiring specific steps needed to modify or install treatment facilities, operations or other measures and deadlines for completion of those steps. Factors that the Division shall consider in developing the deadlines to be included in a compliance schedule, based on information that may be provided by the permittee or is otherwise known, shall include:
 - (i) Availability of resources needed to modify or install treatment facilities, adjust operations or other measures, including any in-house resources, the availability of consultants and contractors in the area with the appropriate expertise, and the availability of financing for any identified facility construction or other capital project, including the Water Pollution Control Revolving Fund;
 - (ii) Current conditions at the site, including existing treatment processes, the physical characteristics of the property, and the layout of the facility on

- the property;
- (iii) Sufficient time for operational startup, new plant optimization, and operator training;
- (iv) Factors identified by the permittee that might significantly affect the time necessary to complete one or more of the steps necessary to attain compliance;
- (v) Sufficient time for the permittee to execute and implement a trade pursuant to section 85.5(3)(d);
- (vi) Sufficient time in the event the permittee undertakes a pilot project to develop and/or test new treatment technology for reduction of total inorganic nitrogen or total phosphorus; and
- (vii) Other site specific factors affecting the cost and timing of construction activities.

(b) Exceptions

The numerical effluent limitations set forth in sections 85.5(1)(a)(iii), 85.5(1)(b), and 85.5(2) shall not apply under the following circumstances:

- (i) Where a discharger demonstrates to the satisfaction of the Division that its discharge is unlikely to cause or contribute to ambient nutrient concentrations in its receiving waters that exceed the relevant numeric levels for total phosphorus and total nitrogen set forth in section 31.17 of Regulation #31;
- (ii) Where noncontact cooling water discharges contain nutrients (phosphorus or nitrogen) and nutrients in the discharge originate from the receiving water as intake water or through use of chemicals shown to be necessary for proper operation of the cooling tower;
- (iii) Where discharges consist solely of ground water that is pumped for the purpose of dewatering a construction site or for building sumps so long as no phosphorus or nitrogen is added to the ground water being discharged; or
- (iv) If effluent concentrations higher than the applicable numerical limitations under this Control Regulation are adequate to achieve the total phosphorus and total nitrogen instream values set forth in section 31.17 of Regulation #31, then those alternative concentrations will apply as effluent limitations under Regulation #85 rather than the numerical limitations set forth in sections 85.5(1) and 85.5(2) hereof.

(c) Variances

- (i) Variances from the numerical effluent limits set forth in sections 85.5(1)(a)(iii), 85.5(1)(b) and 85.5(2) of this control regulation may be granted by the Division where it is demonstrated by the permittee to the Division's satisfaction that the nutrient reduction benefits of meeting the section 85.5 effluent limitations do not bear a reasonable relationship to the economic, environmental, or energy impacts resulting from meeting those effluent limitations. Meeting the effluent limitations in section 85.5 shall be presumed not to bear a reasonable relationship to the associated economic, environmental, or energy impacts where:
 - (A) Greater than 50% of the median annual TN or TP incremental load

within the 8-digit Hydrologic Unit Code (HUC) watershed results from permitted process wastewater point source discharges, if

- for public sector entities, the Municipal Screener value is 2 or greater.
- for private sector entities, the required increase in treatment will cause more than 10 percent change in the entity's level profitability, or similar effect on liquidity, solvency, and leverage.
- (B) 20-50% of the median annual TN or TP incremental load of the 8-digit HUC watershed results from permitted process wastewater point source discharges if:
 - for public sector entities, the Municipal Screener value is 1.5 or greater.
 - for private sector entities, the required increase in treatment will cause 5 to 10 percent change in the entity's level of profitability, or a similar effect on liquidity, solvency, and leverage.
- (C) < 20% of the median annual TN or TP incremental load of the 8-digit HUC watershed results from permitted process wastewater point source discharges if:
 - for public sector entities, the Municipal Screener value is 1 or greater.
 - for private sector entities, the required increase in treatment will cause less than 5 percent change in the entity's profitability, or a similar effect on liquidity, solvency, and leverage.
- (ii) A request for a variance shall be accompanied by proposed alternate effluent limits that represent the highest degree of nutrient removal that is consistent with the reasonable relationship test.
- (iii) Variances shall be granted, denied, or revised as appropriate at the time of permit issuance or renewal.
- (d) Nutrient Trading
 - (i) Point Source to Point Source Nutrient Trading. The numerical effluent limitations set forth in sections 85.5(1)(a)(iii), 85.5(1)(b) and 85.5(2) may be modified for individual discharge permits pursuant to a trade of nitrogen or phosphorus between point sources where the Division has determined that the trade will result in equal or better instream water quality for that parameter at all locations and at all times. Point source to point source nutrient trades shall be based on a 1:1 ratio.
 - (ii) Nonpoint Source to Point Source Nutrient Trading. The numerical effluent limitations set forth in sections 85.5(1)(a)(iii), 85.5(1)(b) and 85.5(2) may be modified for individual discharge permits pursuant to a trade of nitrogen or phosphorus credits from a nonpoint source to a point source on a stream segment or watershed basis where the Division has determined that the trade achieves a net water quality or environmental benefit and does not cause adverse localized impacts.

Nonpoint source to point source trades shall be based on a minimum 2:1 ratio, but may be revised based on site-specific data that demonstrates a lower ratio achieves the criteria specified in Section 85.3(d)(ii).

- (4) MS4 Permit Requirements for Nutrient Source Reductions
 The following requirements, at a minimum, shall be incorporated into a CDPS Permit for discharges from a Municipal Separate Storm Sewer System (MS4) required to obtain a CDPS Permit pursuant to Regulation #61.
 - (a) Public education and outreach on stormwater impacts associated with nutrients. The MS4 permittee must develop, document, and implement a public education program to reduce water quality impacts associated with nitrogen and phosphorus in stormwater runoff and illicit discharges and distribute educational materials or equivalent outreach to targeted sources (e.g., residential, industrial, agricultural, or commercial) that are contributing to, or have the potential to contribute, nutrients to the waters receiving the discharge authorized under the MS4 permit. CDPS Permits shall authorize MS4 permittees to meet the requirements of this section through contribution to a collaborative program to evaluate, identify, target and provide outreach that addresses sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the MS4 permittee's discharge(s).
 - (b) Pollution Prevention/Good Housekeeping for Municipal Operations associated with nutrients. The permittee must develop and implement a municipal operations program that has the ultimate goal of preventing or reducing nitrogen and phosphorus in stormwater runoff associated with the MS4 permittee's operations. Written procedures for an operation and maintenance program to prevent or reduce nitrogen and phosphorus in stormwater runoff associated with the MS4 permittee's operations shall be developed. The program must specifically list the municipal operations (i.e., activities and facilities) that are impacted by this operation and maintenance program.

CDPS Permits shall authorize MS4 permittees to meet the requirements of this section through contribution to a collaborative program to evaluate, identify, and target sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the MS4 permittees discharge(s).

- (5) Nonpoint Source Discharges
 - (a) Best Management Practice Implementation
 - (i) Governmental entities, individuals, corporations, partnerships, associations, agencies, and other entities with responsibility for activities or facilities that cause or could reasonably be expected to cause nonpoint source nutrient pollution of waters are encouraged to adopt and implement/install BMPs to the maximum extent practicable to reduce nutrient loads from such sources.
 - (ii) Agricultural operations that apply supplemental nutrients as part of crop production activities are encouraged to develop and implement nutrient management plans to the maximum extent practicable to reduce nutrient loads from such sources. Nutrient planning should be based on current soil, manure, and plant tissue test results developed in accordance with guidance or industry practice, such as that developed or recognized by

- Colorado State University.
- (iii) The choice of which type of voluntary nonpoint source control measures shall be made by the entities identified in paragraphs (i) and (ii) above.
- (iv) The Division shall collaborate with owners/operators of agricultural operations in pursuing incentive, grant, and cooperative programs to control nonpoint source pollution related to agricultural and silvicultural practices.
- (b) Public Information and Education
 - (i) The Division and entities identified in Section 85.5(5)(a)(i) are encouraged to develop and implement a public information and education program. This program will focus on the prevention of pollution from sources that could be mobilized from present and future activities as well as measures that could abate known nonpoint source pollution. Areas for abatement include, but are not limited to, general agricultural and silvicultural practices, landscaping activities, and other nonpoint sources of nutrients.
 - (ii) The program will be consistent with the voluntary, incentive-based approach and focus on the general public, and agricultural and local government sectors.
- (c) Additional Nonpoint Source Actions
 - (i) During the triennial review of this control regulation, the Division shall report to the Commission on the progress implementing the activities addressed under this section.
 - (ii) If voluntary nonpoint source BMPs are not effective in managing nutrients by May 31, 2022, the Commission may consider the adoption of prohibitions or precautionary measures to further limit nutrient concentrations.
 - (iii) Pursuant to section 25-8-205(5), C.R.S., after May 31, 2022 the Commission may consider adopting, in consultation with the commissioner of agriculture, control regulations specific to agricultural and silvicultural practices if the Commission determines that sufficient progress has not been demonstrated in agricultural nonpoint source nutrient management.

85.6 MONITORING REQUIREMENTS

- (1) Monitoring requirements are established by this Control Regulation to evaluate the effectiveness of this control regulation and to determine the sources and load of nutrients at selected locations, and eventual implementation of appropriate and necessary source controls.
- (2) Point Source Monitoring Process Wastewater Dischargers
 - (a) Applicability. The requirements of this section apply to all DWWTW including federal facilities, and to any non-domestic dischargers in SIC Major Category 20 or that are identified by the Division pursuant to section 85.5(2), except that facilities that are excluded from effluent limits as described in Section 85.5(1)(a)(i) are only required to conduct effluent monitoring as described below in Section 85.6(2)(b)(i). Facilities that discharge to lakes may have modified monitoring requirements. Monitoring of flow, TP, TN, and TIN is required for discharges from cooling towers to determine the relative amount of nutrient (if

- any) that is added to the flow diverted from state waters. Monitoring of the inflow, discharge, and any nutrient in added chemicals is required beginning November 1, 2012 and shall continue for a period of 24 months through October 31, 2014. A report summarizing all analytical results and the loads (lbs./day) in the inflow, the effluent, and added chemicals is required to be submitted by February 28, 2015.
- (b) Nutrient Monitoring Program: Facilities identified in subsection (2)(a), above, shall develop, implement, and document a routine water quality monitoring program. The monitoring program shall be designed to characterize the load (coincident flow and concentration) of nutrients in the discharge, the concentrations in the receiving water above the discharge, and the load of nutrients at selected locations in the rivers and streams below the discharge. The monitoring program shall include the following information:
 - (i) Effluent Monitoring:
 - (A) Locations: Sampling for nutrients is required in the effluent before it is discharged into the receiving water body at the location where monitoring is performed to satisfy other CDPS <u>and NPDES</u> permit requirements.
 - (B) Parameters: At a minimum, sufficient data shall be collected to calculate TN, TIN, and TP load. Samples of treated effluent shall be analyzed for total nitrogen (or the components to calculate total nitrogen such as total Kjeldahl nitrogen plus nitrate-nitrite) and total phosphorus (or the components to calculate total phosphorus). Daily average effluent discharge shall be collected at the same time as the nutrient concentrations are measured.
 - (C) Frequency: Samples shall be collected a minimum of six times a year (every two months) for minor discharges and monthly for major discharges. Should there be no discharge due to the plant being offline or other reasons, zero discharge will be reported for that monitoring event.
 - (ii) Stream Nutrient Monitoring:
 - (A) Locations: Sampling for nutrients is required in the receiving water body:
 - upstream of the discharge; and
 - at the closest active Colorado Division of Water Resources or United States Geological Survey (USGS) gaging station with daily flow available throughout the year downstream of the discharge's mixing zone; or
 - In lieu of the closest downstream Division of Water Resources or USGS gaging station, facilities may take part in collaborative watershed-based monitoring efforts if the parameters and frequency follow sections (B) and (C) below.
 - (B) Parameters: At a minimum, samples shall be analyzed for total nitrogen (total Kjeldahl nitrogen plus nitrate-nitrite, or the components to calculate total nitrogen) and total phosphorus (or

- the components to calculate total phosphorus). Daily streamflow record will be collected where an established gaging station is present. Where an established gaging station is not available, an alternative streamflow calculation methodology may be approved by the Division.
- (C) Frequency: Samples shall be collected a minimum of six times a year (every two months) for minor discharges and monthly for major discharges.
- (iii) Lake/Reservoir Monitoring: RESERVED
- (iv) Timing: Entities shall commence data collection no later than March 1, 2013.
- (3) Point Source Data Collection Municipal Separate Storm Sewer System Dischargers
 - (a) Applicability: The requirements of this section apply to all MS4s owned or operated by cities, towns, counties, and city and counties that are required to have a CDPS discharge permit pursuant to Regulation #61 for stormwater discharges from a Municipal Separate Storm Sewer System (MS4) and for which coverage was obtained prior to March 1, 2012.
 - (b) Purpose: The purpose of this section is to identify information that exists, and the need for additional monitoring to be conducted in the future, to determine the approximate nitrogen and phosphorus contribution to state waters due to discharges from MS4.
 - (c) Discharge Assessment Data Report: The MS4 permittee shall develop, document and submit to the Division a Discharge Assessment Data Report (Data Report) by October 31, 2014, that: documents the availability of existing data, and a "Gap Analysis" that identifies the need for additional information (e.g., monitoring data or studies), in accordance with the requirements of this section.
 - (i) Objectives: The Data Report must provide information on existing data and identify additional information necessary that would allow for future analysis to meet all of the following objectives:
 - (A) Allow for the determination of representative estimates that quantify MS4 discharge flows and associated concentrations, and loads of total nitrogen and total phosphorus from the permittee's MS4. This shall include representative annual or seasonal information to define significant nutrient loads from different land uses due to rainfall events, snowmelt events, and/or dry weather flows. The information used for making the determination must be from one or more of the following sources:
 - 1. monitoring data collected at the discharge from the MS4, at a location within the MS4, or in state waters downstream of the discharge from the MS4;
 - 2. monitoring data collected by one or more different entities that is shown to provide information that supports the evaluation in (A), above;
 - 3. land use type based model(s) developed to predict nutrient concentrations in discharges from MS4s that is(are) shown to provide information that supports the evaluation in (A),

- above; and
- land-use type-based runoff nutrient concentration/load values in published studies, manuals, or literature shown to provide information that supports the evaluation in (A), above.
- (B) Estimates determined in accordance with (A), above:
 - 1. are not required to be provided for individual outfalls, and may be provided for the cumulative discharges from the MS4 to a specific receiving water(s) or watershed(s);
 - are not required to address point source discharges specifically authorized by CDPS permits other than for discharges from an MS4; and
 - 3. shall, as necessary to provide representative information, take into account the land uses, imperviousness, watershed hydrology, and precipitation data and other appropriate factors within the permitted area under the MS4 permit.
- (ii) The Data Report shall document the following, at a minimum:
 - (A) The source(s) of the existing data, including, or providing a reference to general information available for Division review.

 Where monitoring data are provided, it shall include a description of the methods used for sample collection, field, and laboratory analysis. All existing data used to meet the requirements of this section shall have been obtained from sources using quality assurance/quality control protocols and standards in general accordance with accepted good monitoring and analysis procedures.
 - (B) For discharge data identified in the Data Report that is associated with rainfall or snowmelt events: available documentation of associated and relevant storm event data over the contributing watershed during the monitored event(s), including duration (in hours) of the rainfall event, and magnitude (in inches).
 - (C) For receiving water monitoring data identified in the Data Report:
 available quantitative or qualitative information associated with the
 monitoring plan or study that generated the data that determines, or
 could be used to determine, the probable contributions of nitrogen
 and phosphorus during the monitored events from the MS4
 discharges.
 - (D) A summary of the Gap Analysis, including either:
 - 1. Information to support a determination that the existing data provided in accordance with subsection (A), above, fully or partially meets the objectives subsection in 85.6(3)(c)(i), above; and
 - 2. Identification of the "data gaps" for which additional information is determined necessary to meet the objectives in subsection 85.6(3)(c)(i).
- (iii) Collaboration with Other MS4 Permittees: To comply with the

requirements of subsection 85.6(3)(c) MS4 permittees may collaborate in the development and documentation of a report with other MS4 permittees that identifies data and the supporting information that is shown to be meet the objectives of 85.6(3)(c)(i) for each participating MS4. Data do not have to be collected from each MS4 so long as they are shown to be representative of the quality of the stormwater being discharged. Data must be representative of land uses, imperviousness, watershed hydrology, and precipitation within the area which the data are intended to represent.

- (d) The Division shall notify the permittee if the Division determines that the Data Report is not adequate to meet one or more of the requirements of this regulation. Such notification shall identify which provisions of the submittal, if any, require modification. Within 60 days of such notification from the Division, or a later date agreed to by the Division, the permittee shall make the required changes and re-submit the Data Report or demonstrate to the Division's satisfaction that the requirement has been met.
- (e) An MS4 permittee shall furnish to the Division, within a reasonable time, information which the Division indicates is necessary to determine compliance with the requirements of section 85.6(3).
- (<u>34</u>) Data Quality Requirements
 - (a) The entities collecting the samples will document, and make publicly available the sampling methods, analytical methods, method detection limits, required field condition and physical parameters to be recorded at each sampling event, and quality control and quality assurance protocols in a sampling and analysis plan.
 - (b) The information required under subsection (a) above, may be evaluated by the Division for compatibility with the objectives of this section. Where the Division identifies deficiencies in the protocols/methods being used to meet the objectives of subsection (a) above, the entities shall make appropriate revisions such that the Division-identified deficiencies are addressed.
 - (c) All sampling and analysis shall be performed by the entities according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division. The analytical method for all ambient monitoring conducted in accordance with this regulation shall be capable of reporting results at or below the following method detection limits (MDL):

Total Phosphorus 0.01 mg/L
Nitrate + Nitrite 0.02 mg N /L
Total Kjeldahl 0.1 mg N /L

Nitrogen

Total Nitrogen 0.1 mg/L

All results above the MDL must be reported for ambient samples. The analytical method for all effluent monitoring conducted in accordance with this Regulation shall be capable of reporting results at or below the practical quantitation limit (PQL). Applicable PQLs can be found in WQC Policy CW 6., as required by Regulation #61.

(d) The permittee shall submit a certification to the Division that the sampling and analysis plan is in place and that monitoring is taking place. by March 1, 2013. This certification is due to the Division by 6 months after permit issuance

or by March 2013 if the permit was in place prior to March 2013.

- (45) Nonpoint Source and Unpermitted Point Source Monitoring
 - (a) Entities responsible for nonpoint sources and unregulated point sources of nutrients are encouraged to monitor and assess surface water resource quality as identified in Section 85.6(2) to determine the extent and magnitude of nutrient impacts. In addition, the Commission recognizes state water conservation, water conservancy, and special irrigation districts as entities that monitor and assess surface water resource quality and encourages making this data publicly available for use in nonpoint source management efforts.
 - (b) The Division shall collaborate with these entities in developing and implementing a nutrients nonpoint source monitoring program to meet the requirements of this control regulation.
 - (c) Future monitoring activities are encouraged to coordinate with point source nutrient monitoring, the Colorado Agricultural Chemicals Program, and other relevant local, state, and federal monitoring efforts.
 - (d) The responsible entities are encouraged to identify potential funding sources and pursue options for monitoring in areas that do not have a current or future nutrient monitoring program.
- (56) Availability and Reporting of Data
 - All data collected under Section 85.6 shall be maintained by the facility for 5 years after submission in an electronic form. All data collected pursuant to this control regulation shall be submitted to the Division by April 15th of each year. The submission shall include geographic location of sampling, CDPS or NPDES permit number (if appropriate), name and identification of the stream flow gage, as follows:
 - (a) In electronic data deliverable as specified for receipt by the Division; or
 - (b) Electronic submission to an alternative publicly available data repository. If this option is selected, the Division must be notified by <u>April 1 April 15</u> of each year, <u>data must be submitted to the Division by April 15</u> and <u>the Division will make</u> all relevant data must be accessible to the public.

85.7 DISADVANTAGED COMMUNITIES

- (1) Disadvantaged community ("DAC") means a community that has a population of 10,000 or less and meets the required combination of primary and secondary factors specified in section (3) below.
- (2) For purposes of determining whether a community meets the definition of a disadvantaged community, the following definitions apply:
 - (a) "10-YEAR CHANGE IN POPULATION" means the average annual change for a location spanning ten years.
 - (b) "ASSESSED VALUE/HOUSEHOLD" means taxable resources on a household basis.
 - (c) "COMMUNITY MEDIAN HOUSEHOLD INCOME" means data that divides local households into two parts with half earning more than the median income and the other half earning less. An income survey completed for another state or federal program can substitute for data that is determined to be unreliable or unavailable.
 - (d) "COMMUNITY MEDIAN HOME VALUE" means data that divides the value distribution of homes into two parts with half of the homes falling below the

- median value and half falling above the median value. When data is unreliable or unavailable, the county assessor's list of home values can be substituted.
- (e) "COUNTY 10-YEAR CHANGE IN JOBS" means the increase or decrease in total jobs which is comprised of wage and salary jobs as well as self-employed proprietor jobs.
- (f) "COUNTY MEDIAN HOUSEHOLD INCOME" means data that divides county households into two parts with half earning more than the median income and the other half earning less than the median income.
- (3) A community that meets the required combination of primary and secondary factors as specified below is a disadvantaged community for purposes of this Regulation:

Primary and Secondary DAC Factors

| <u>Primary Factors</u> | <u>Benchmark</u> | | |
|--|--|--|--|
| P1 Community Median Household Income (MHI) | Less than or equal to 80 percent of the state MHI. | | |
| P 2 Community Median Home Value (MHV) | <u>Less than 100 percent of the state MHV.</u> | | |
| P3 County 10-Year Change in Johs | Loss in total jobs in the county over a 10 year period. | | |
| Secondary Factors | <u>Benchmark</u> | | |
| S1 County Median Household Income (MHI) | Less than or equal to 80 percent of the state MHI. | | |
| S2 10-Year Change in Population | Community has lost population over a ten year period. | | |
| S3 Assessed Value/Household | Community's total assessed value per household is less than the median Colorado municipality assessed value per household. | | |

DAC Scenarios

| <u>Scenario</u> | <u>Primary Factors</u> | Results | Secondary Factors | <u>Results</u> |
|---------------------------------|--|---------------------------------|----------------------------|----------------|
| 1 (P1) MHI and | (P2) MHV or (P3) Change in Jobs | <u>DAC</u> | <u>Unnecessary</u> | |
| 2(P1) MHI Only | Neither (P2) MHV or (P3) Change in Jobs | <u>Test</u> <u>secondary</u> | Meet at least two of three | DAC |
| 3 (P1) Unreliable MHI but | Both (P2) MHV and (P3) Change in Jobs | Test secondary | Meet at least two of three | DAC |

- (4) At the time of submitting a permit application, a community may request that the division make a determination of whether or not the community is a disadvantaged community.
- (5) In the event a community's primary or secondary factor data does not represent recent, significant economic distress, or a scenario is marginally disqualifying, a business case may be presented for determination of disadvantaged community status. The business case should be quantitatively based on the factors the community has determined as not reflective of the community's current socio-economic condition. The business case should be submitted to the division, who will review the business case regarding the disadvantaged community status. The division will determine whether the business case presented provides compelling evidence that the community is a disadvantaged community.

85.8 – 85.14 **RESERVED**

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85.16 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: OCTOBER 10, 2017 RULEMAKING, FINAL ACTION NOVEMBER 13, 2017; EFFECTIVE DATE OF DECEMBER 30, 2017

The provisions of sections 25-8-202; 25-8-205; 25-8-304; 25-8-401; 25-8-402; and 25-8-501, C.R.S., provide the specific statutory authority for the adoption of this Control Regulation.

The Commission has also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Definition of New and Existing Treatment Facilities: The commission modified section 85.4 DEFINITIONS by adding the terms New Treatment Facility and Existing Treatment Facility and renumbering all definitions based on alphabetic ordering. These terms were added to clarify the commission's previously stated intent that the technology based effluent limits were not to apply to expansions or other improvements to existing facilities in the same location. The previous regulatory language did not clearly indicate that the technology based effluent nutrient limits apply to discharges to surface water only. The new definitions clarify that existing facilities include any treatment facility that commences discharge or receives PELs or site approval for groundwater discharge or surface water discharge or who applies for a Notice of Authorization for the application of reclaimed water prior to May 31, 2012, even if the facility was discharging without a permit. The new definitions also clarify that a change in treatment facility site location will result in application of the effluent limits for new facilities. The definitions do not change existing implementation practices, but merely reinforce current interpretations to prevent any future misunderstanding or misapplication.

Preliminary Effluent Limits: The commission modified section 85.5(1)(a)(i) to allow a standard practice of including Regulation #85 effluent limits in preliminary effluent limits (PELs), with a delayed effective date, for the facilities covered by Section 85.5(1)(a)(ii). While some effluent limits will mirror the limits in Sections 85.5(1)(a)(iii) or (1)(b), in the course of evaluating the Regulation #85 limits for PELS, the division would also be evaluating whether any of the additional exceptions from Section 85.5(3)(b) would apply, resulting either in no effluent limit or Code of Colorado Regulations

a less stringent effluent limit than those contained in Sections 85.5(1)(a)(iii) or (1)(b). This will allow a facility to plan and design the facility to meet the Regulation #85 effluent limits if they choose to do so. In addition, the facility would be able to obtain Site Location and Design Approval for that design. This type of information would be helpful, for example, in a situation where a facility is planning other facility upgrades or is interested in leveraging funding opportunities.

The commission also modified section 85.5(1)(a)(ii) to allow preliminary effluent limits, with delayed effective dates, to be included for small and disadvantaged communities upon request by the facility.

Disadvantaged Communities: Section 85.5 states that the numeric effluent limits do not apply to any domestic wastewater treatment works owned by a disadvantaged community. The commission did not change this exclusion in this hearing. However, the commission did update the definition of disadvantaged communities in order to better examine the socio economic condition of a community and to be more aligned with the State Revolving Loan Fund program definition. First, the commission changed the population threshold from 5,000 to 10,000. Then, multiple criteria are evaluated to determine whether the community is disadvantaged. There are three primary factors that a community will be evaluated against: median household income, median home value, and unemployment rate or job loss. There are three secondary factors that will also be evaluated. Section 85.7 contains a table that outlines which factors must be met in order for a community to be determined to be a disadvantaged community. In the event a community is determined not to be disadvantaged, but the community believes there is an error in the data, the community may present a business case to the division for review. The division will then determine whether a business case has been made such that the community should be determined a disadvantaged community and therefore excluded from application of the effluent limits.

The commission also clarified that if a community wants the division to conduct an evaluation of whether it meets the criteria in section 85.7, the community must request that analysis be conducted at the time of submitting its permit application.

Monitoring and reporting requirements

A two year monitoring requirement for cooling tower discharges existed in Section 85.6(2)(a). This monitoring requirement resulted in the data collection and reporting of nutrient data from inflow, discharge and nutrient added to cooling processes from November 1, 2012 through October 31, 2014. This monitoring requirement was fulfilled and therefore the commission deleted that provision.

A reporting requirement for municipal separate storm sewer system discharges existed in Section 85.6(3). The data was compiled into a report and submitted to the division. This reporting requirement was fulfilled and therefore the commission deleted that provision.

Federal Facilities

The commission modified 85.5 and 85.6 to clarify that Regulation #85 applies to federally operated domestic wastewater treatment facilities that receive National Pollutant Discharge

System Elimination System (NDPES) permits from EPA as Colorado has not been delegated authority to issue permits to federal facilities. Other control regulation requirements apply to federal facilities in Colorado and it makes sense for this control regulation to stand on equal ground in terms of its applicability to federal facilities. The commission added language to clarify that section 85.5 requirements apply to Colorado Discharge Permit System (CDPS) and NPDES permits. In addition, the commission clarified in 85.6 that monitoring requirements apply to federal facilities.

Typos and corrections

In addition to the substantive changes described above, numerous editorial changes have been made in the regulation to provide clarity. Several minor changes were made to further define priority watersheds, delete references that were no longer relevant, and to clarify the monitoring requirements. In addition, several typographical errors have been corrected.